Radioactive Waste Management Complex

Pit 9 cleanup construction begins

WASTE AREA GROUP 7

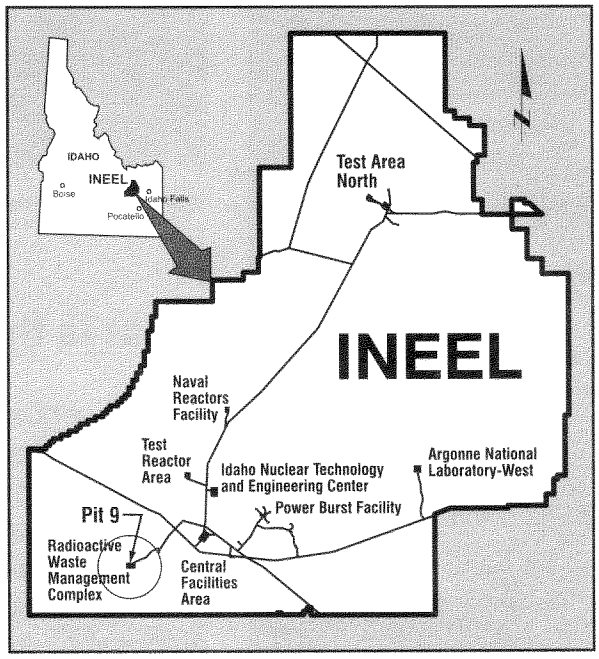
Definitions

Waste Area Group (WAG): one of the 10 administrative management areas established under the INEEL Federal Facility Agreement and Consent Order. The Radioactive Waste Management Complex is designated as Waste Area Group 7

Federal Facility Agreement and Consent Order (FFA/CO): an agreement among the DOE, the U.S. Environmental Protection Agency and the state of Idaho to evaluate potentially contaminated sites at the INEEL, determine if remediation is warranted, and select and perform remediation if necessary

Operable Unit (OU): an area or areas with distinct characteristics or similar wastes grouped for management efficiency

Contractor employees at the U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory began assembling a steel shoring box on July 30, 2002, at the Radioactive Waste Management Complex, marking the start of construction on the Pit 9 Glovebox Excavator Method project. By starting construction on July 30, the INEEL beat the milestone deadline of Nov. 30, 2002, by four months. The Radioactive Waste Management Complex is designated as **Waste Area Group** 7 under the **Federal Facility Agreement and Consent Order.**



Pit 9 is located at the Radioactive Waste Management Complex.

Bechtel BWXT Idaho, LLC took over responsibility for the Pit 9 project in 1999 when it became the management and operating contractor for the INEEL. In April 2002, DOE, the U.S. Environmental Protection Agency and the state of Idaho signed an agreement that set new milestone dates for the proposed Glovebox Excavator Method project.

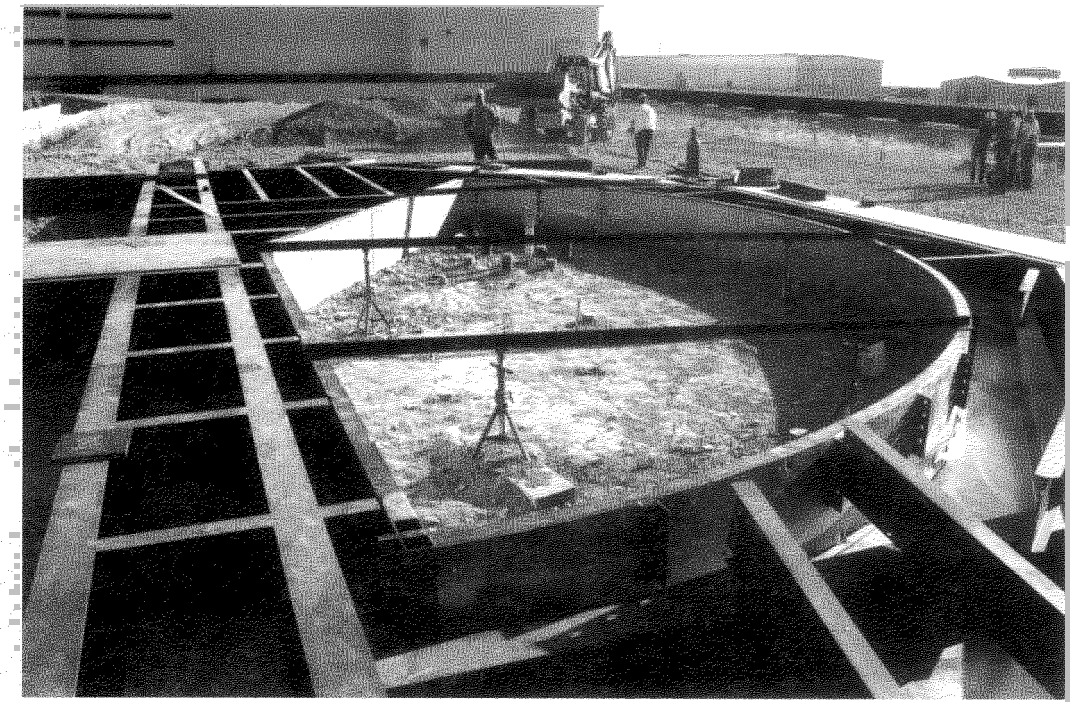
Background

Pit 9, designated as **Operable Unit** 7-10, located at the Radioactive Waste Management Complex in the southwestern portion of the INEEL, was operated as a waste disposal pit from November 1967 to June 1969. Pit 9 is approximately an acre in size and is an average of 17.5 feet deep. The waste disposed of in Pit 9 included **transuranic** waste generated from weapons production at the DOE's Rocky Flats Plant in Colorado, as well as low-level radioactive waste and miscellaneous chemical wastes generated at the INEEL.

Transuranic (TRU): refers to waste contaminated with elements that have an atomic number greater than 92, the atomic number of uranium. Transuranics include wastes like plutonium and americium

Underburden: soil that lies between the waste material and the bedrock underneath the Radioactive Waste Management Complex

Overburden: the approximately 4 feet of soil that lies over the waste material in Pit 9



Workers assemble the floor framework that will support the confinement structure

What is the Glovebox Excavator Method project?

The Glovebox Excavator Method project represents a safe, simple and reliable approach to achieving the goals of the Pit 9 project. These goals include demonstrating waste zone retrieval in a small portion of the roughly one-acre Pit 9, providing information on contaminants present in the **underburden** and characterizing waste for safe and compliant storage, and packaging it in containers to be stored pending permanent disposal off-site.

DOE approved the early start of construction so that the weather enclosure could be completed before winter. The weather enclosure will allow construction activities to continue through the winter months.

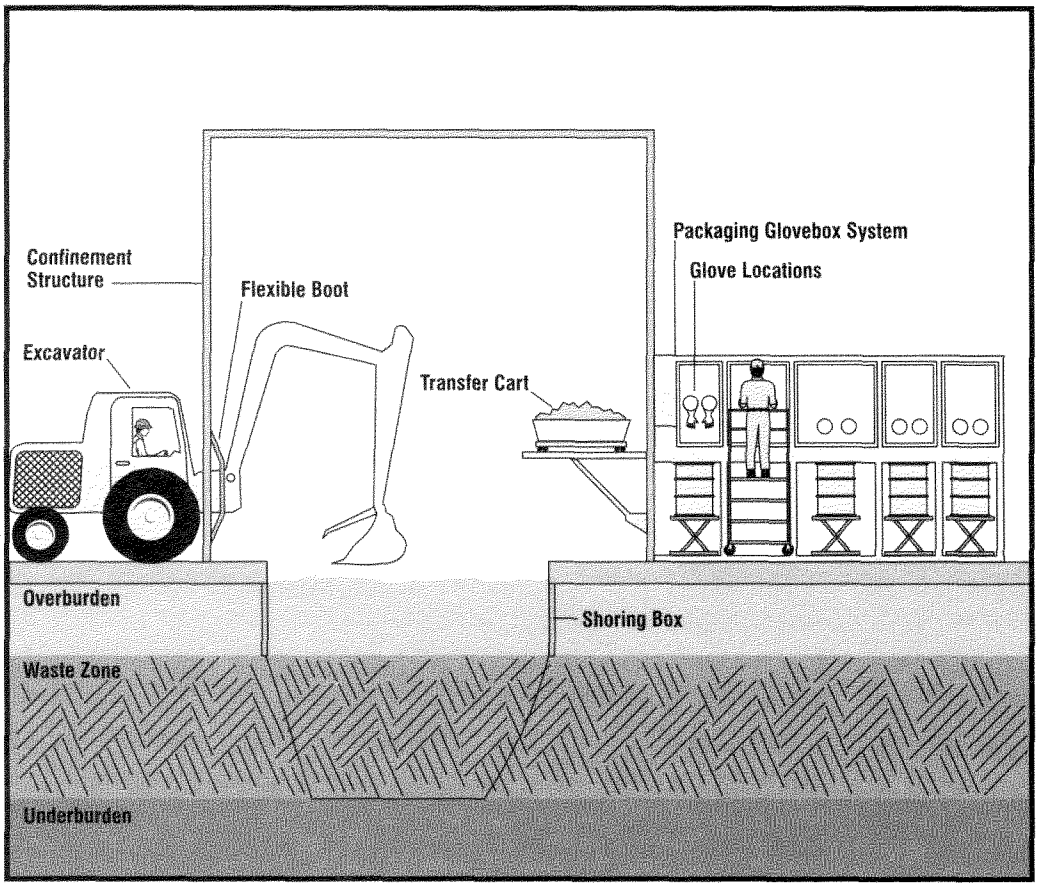
The packaging glovebox systems, which allow workers to handle and sort waste without risk of exposure, are scheduled for delivery in December 2002 and January 2003, with construction completion planned by May 2003. Operations staffing will ramp up during the first three months of calendar year 2003, and with DOE approval, Pit 9 excavation can begin as soon as September 2003.

Once excavation begins, it will continue around the clock until it is complete, with 75-125 cubic yards excavated. Trained operations staff will first remove the **overburden**, then excavate the waste material itself using the arm of a backhoe that will be operated from outside a sealed

confinement structure. This confinement structure will use negative air pressure to contain any airborne contaminants that might be stirred up during operation.

The waste will be placed on transfer carts mounted to a rail system that transports the material into a system of gloveboxes where workers will sample and separate the waste material. The waste will then be sealed into barrels and temporarily stored pending future off-site disposal. Each of the three gloveboxes is equipped with three stations where workers will package the material in 55-gallon or 85-gallon drums.

After demonstration excavation is complete, workers will take samples of the underburden, replace the overburden soil, grout the retrieval pit and decontaminate the facilities. Excavation is planned to take less than three months.



Glovebox Excavator Method project concept illustration

Pit 9 Project deadlines

Submit Stage II Remedial Design (the completed project design) no later than Oct. 31, 2002. Idaho and EPA will have 25 days to review the Stage II Remedial Design

Commence Stage II construction no later than Nov. 30, 2002, and submit notification to DEQ and EPA. *Completed July 30, 2002*

Commence Stage II excavation no later than March 31, 2004, and submit notification to the Idaho Department of Environmental Quality (DEQ) and EPA of commencement of excavation

Complete excavation no later than Oct. 31, 2004 and submit notification of completion of Stage II excavation to DEQ and EPA

GA02-50815-02

What happens after the Pit 9 excavation is complete?

All information gained during the excavation, sorting and packaging of the waste material will be analyzed and applied to future decisions. DOE, EPA and the state of Idaho will use that information to determine the best remedial alternative for the rest of Pit 9 and the Subsurface Disposal Area.

More detailed information is available in the Administrative Record file for Operable Unit 7-10. The Administrative Record is located at the DOE Reading Room of the INEEL Technical Library in Idaho Falls. Copies can be found at Albertsons Library on the Boise State University campus and the University of Idaho Library in Moscow. The Administrative Record can be accessed on the Internet at http://ar.inel.gov/home.html.

Workers install the steel floor structure for the Pit 9 Glovebox Excavator Method project.

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